

Supplementary Online Content

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This supplementary material has been provided by the authors to give readers additional information about their work.

eMethods 1. Expanded Notes on Study Methods

Background

Characteristics of the Cook County Juvenile Temporary Detention Center (CCJTDC)

Consistent with juvenile detainees nationwide,¹ nearly 90% of detainees at CCJTDC were male; most were racial/ethnic minority youth.

Sampling and Procedures

Participants were 1829 male and female youth, 10 to 18 years old, randomly sampled from intake into the CCJTDC from November 20, 1995, through June 14, 1998. The sampling was stratified by sex, race/ethnicity (African American, non-Hispanic white, Hispanic, and “other” race/ethnicity), age (10-13 years or ≥ 14 years), and legal status (processed in juvenile or adult court) to obtain enough participants to examine key subgroups (e.g., females, Hispanics, younger persons). There were 13 strata, as listed below. There were too few female detainees of each race/ethnicity and detainees identified as “other” race/ethnicity to further stratify these groups. Detainees aged 10 to 13 years were not stratified by legal status because they were generally too young to be considered for transfer to adult court.

Strata:

- African American females
- Non-Hispanic white females
- Hispanic females
- African American males, aged 10-13 years
- Non-Hispanic white males, aged 10-13 years
- Hispanic males, aged 10-13 years
- African American males, 14 years or older and processed as adult transfer
- Non-Hispanic white males, 14 years or older and processed as adult transfer
- Hispanic males, 14 years or older and processed as adult transfer
- African American males, 14 years or older and processed as a juvenile
- Non-Hispanic white males, 14 years or older and processed as a juvenile
- Hispanic white males, 14 years or older and processed as a juvenile
- Other race/ethnicity

A study liaison was scheduled to work every day (including weekends) throughout the study. Each day, the liaison randomly selected potential participants within strata. Detainees were classified in strata using information listed in the intake log. The liaison sampled from the strata in a preset order. If no participants were available for a stratum, the liaison sampled from the next stratum. If multiple detainees were available for a stratum, the liaison used a random number table and the last digit of the CCJTDC ID number to randomly sample potential participants from within the stratum.² The final sampling fractions for the strata ranged from 0.018 to 0.689.

All detainees who were awaiting the adjudication or disposition of their case were eligible to participate in the study. Among these, 2275 detainees were randomly selected; 4.2% (34 youth and 62 parents or guardians) refused to participate. There were no significant differences in refusal by sex, race/ethnicity, or age. Twenty-seven youth left the detention center before an interview could be scheduled; 312 left CCJTDC while we attempted to locate their caretakers for consent. Eleven others were excluded from the sample because they were unable to complete the interview. The final sample size was 1829: 1172 males, 657 females; 1005 African Americans, 296 non-Hispanic whites, 524 Hispanics, 4 “other” race/ethnicity; age range, 10 to 18 years (mean, 14.9 years; median, 15 years) (see **Table 1**).

The most common offenses were violent crimes (55.4%), property crimes (43.5%), violation of probation or parole (36.4%), drug crimes (30.7%), and weapons crimes (13.5%). (Numbers sum to >100% because participants could be arrested for more than 1 charge.)

Face-to-face structured interviews were conducted at the detention center in a private area, most within 2 days of intake. Participants were paid \$25 for the 2- to 3-hour baseline interview.

All participants were interviewed at approximately 3, 5, 6, 8, 12, 14, and 15 years after the baseline interviews. A random subsample of 997 youth (600 males and 397 females) received additional interviews at 3.5 years and 4 years. The last 800 participants enrolled at baseline (460 males and 340 females) also received additional interviews at 10, 11, and 13 years after the baseline interviews. (Our design was determined, in part, by when funding became available.)

We re-interviewed participants irrespective of where they lived, depending on follow-up: in the community (65%-69% of interviews); at correctional facilities (15%-29% of interviews); by telephone if they lived more than 2 hours away (4%-16% of interviews); or in a placement, such as a group home (<2% of interviews). Participants were paid \$50 for the 3- through 6-year follow-up interviews; \$75 for the 8- through 13-year follow-up interviews; and \$100 for the 14- and 15-year follow-up interviews, each lasting approximately 3 to 4 hours.

Youth Processed in Juvenile or Adult Court

Although most juvenile offenders are processed in juvenile court, all 50 states and the District of Columbia have legal mechanisms to try juveniles as adults in criminal court.^{3,4} Transfers to adult criminal court typically result from (1) judicial waiver on a case-by-case basis⁵⁻⁷; (2) automatic transfers based on the type of offense, criminal history, and age of the detainee⁵; and (3) prosecutorial direct-file mechanisms that allow prosecutors to determine when to file certain juvenile cases directly in adult criminal court.⁵ The increased availability of legal mechanisms to process juveniles in adult criminal court is largely responsible for the 366% increase between 1983 and 1998 in the number of juveniles held in adult jails.⁸ As of 2004, about 7% of the approximately 2 million arrests of youths eligible for processing in the juvenile justice system were cases in which the youth was transferred directly to adult criminal court.^{9,10}

Procedures for Obtaining Parental Consent for Minor Youth for Baseline and Follow-up Interviews

For all interviews, participants signed either an assent form (if they were <18 years) or a consent form (if they were \geq 18 years). The Northwestern University Institutional Review Board and the Centers for Disease Control and Prevention Institutional Review Board approved all study procedures and waived parental consent for persons younger than 18 years, consistent with federal regulations regarding research with minimal risk.¹¹ We nevertheless attempted to contact parents of minors to obtain their consent and to provide them with information on the study and used an independent participant advocate to represent the minors' interests.¹¹

Baseline: Study liaisons tried to reach detainees' parents or guardians in 2 ways: first, they attempted to call them by telephone at least 3 times over 2 days. Second, they tried to obtain consent from the parents or guardians in person during visiting hours. A participant advocate acted on the child's behalf if the parents or guardians were not reachable. In the absence of a parent or guardian, the participant advocate protects the interests of the youth and determines that they are consenting voluntarily, understand the research procedure, and are not being coerced to participate. Consistent with federal regulations, we excluded detainees who did not wish to participate, even if their parents or guardians consented.^{11,12}

Follow-up: Two weeks before a follow-up interview was due, a liaison telephoned the parent or guardian of minors to obtain their consent. If they provided consent, the liaison then contacted the youth to obtain assent and schedule their interview. The Illinois Department of Child and Family Services allowed us to recontact and interview participants who were under their guardianship, provided that we received assent from the youth. As with baseline interviews, we excluded detainees who did not wish to participate, even if their parents or guardians consented. Also as with baseline interviews, minors could still participate even if we could not reach their parent or guardian. If we could not reach them after 1 week and at least 5 attempts, we initiated the participant advocate system described earlier. In these cases, the liaison contacted the participant directly to request his or her assent. If we could not reach the participant by phone, an interviewer traveled to his or her location.^{11,12}

Clinical Research Interviewers

For baseline and follow-up interviews, female participants were interviewed by female interviewers. Most interviewers had graduate degrees in psychology or an associated field and had experience interviewing at-risk youth; one-third were fluent in Spanish. All interviewers were trained for at least 1 month. Follow-up interviews were longer than baseline interviews because, at the request of our funding agencies, we added additional variables.

Measures and Variables

Race and Ethnicity

At the baseline interview, participants self-identified as white, black, Hispanic, or other. All participants who identified as Hispanic were classified as Hispanic regardless of race. Beginning with the follow-up interviews, we assessed race and ethnicity separately. We present the original classifications to be consistent with prior publications on this sample.

Baseline

We administered the Diagnostic Interview Schedule for Children, version 2.3 (DISC 2.3)^{13,14} based on the *DSM-III-R*, the most recent version available at the time. The DISC 2.3 generates diagnoses for major depression, dysthymia, mania, hypomania, panic disorder, generalized anxiety disorder (GAD), conduct disorder (CD), alcohol use disorder, and drug use disorder for the past 6 months. We derived diagnoses for specific “other” illicit drug use disorders the same way the DISC 2.3 scores alcohol and marijuana use disorders. Because the DISC 2.3 did not include posttraumatic stress disorder (PTSD), we used the module from the Diagnostic Interview Schedule for Children, version IV (DISC-IV) when it became available, 13 months after the study began.¹⁵ Additional detail on baseline diagnostic decisions can be found elsewhere.^{2,15,16}

Follow-up Interviews

We administered the DISC-IV (Child and Young Adult versions),^{17,18} based on the *DSM-IV*, to assess the past-year prevalence for mood disorders (mania, major depression, hypomania, and dysthymia), anxiety disorders (GAD, panic disorder, and PTSD), attention-deficit/hyperactivity disorder (ADHD), disruptive behavior disorders (CD, and oppositional defiant disorder [ODD]). ADHD, CD, and ODD were assessed until the 6-year follow-up interviews when most participants reached age 18 years.

Beginning with the 6-year follow-up interview, we used the World Mental Health Composite International Diagnostic Interview (WMH-CIDI),^{19,20} based on the *DSM-IV*, to assess major depression, dysthymia, mania, hypomania, panic disorder, GAD, and PTSD (past year).

To assess substance use disorders and antisocial personality disorder (ASPD) at follow-up interviews (past year), we administered the Diagnostic Interview Schedule, version IV (DIS-IV).^{21,22} We used the DIS-IV because the DISC was not sufficiently comprehensive to cover the substance use behaviors of aging delinquent youth. Antisocial personality disorder was assessed for participants 18 years and older (who were no longer eligible for childhood disruptive behavior disorders). Consistent with the National Comorbidity Survey Replication,²³ participants who met criteria for substance use disorder or APD with “partial recovery” were scored as having the disorder.

The diagnosis of ASPD requires a diagnosis of CD before age 15.²⁴ We discontinued retrospective assessment of CD after the 8-year follow-up interview due to participant fatigue. To score ASPD, we derived a lifetime CD variable using previous interviews. This variable is positive if a participant ever met criteria for CD in any interview from baseline to the 8-year follow-up. For consistency, we used this variable to determine diagnoses of ASPD for all interviews. In the results section, we discuss the prevalence and persistence of any disruptive behavior disorder from baseline to the 15-year follow-up. We also discuss the prevalence of ASPD beginning with the 3-year follow-up interview, when it was first administered to participants who were aged 18 years and older. Prevalence estimates and odds ratios associated with CD, ODD, and ADHD diagnosed in participants younger than age 18 can be found in previously published work.^{2,25}

Models for Continuity of Disorders Over Time

As in our prior work,²⁶ we examined the continuity of disorders over time: Did youth with a disorder at baseline have greater odds of having the same (or different) disorders 15 years later, compared with youth without the disorder? We used logistic regression with disorder at baseline as the independent variable and disorder at the 15-year interview as the dependent variable. We estimated separate models for males and females. All models predicting substance use disorders at follow-up were adjusted for time in corrections because access to substances is restricted in correctional settings.

We also examined adjusted logistic regression models that included whether the disorder being predicted at follow-up was present at baseline as well. For example, is major depression at baseline associated with alcohol use disorder 15 years later, even after adjusting for having alcohol use disorder at baseline?

Comparability of Diagnoses Over Time

Our diagnostic measures of mood and anxiety disorders changed because beginning with the 6-year follow-up, we administered the World Mental Health Composite International Diagnostic Interview (WMH-CIDI),^{19,20} based on the *DSM-IV*, rather than the DISC-IV (also based on *DSM-IV*) that was administered at the first 4 follow-up interviews. To check that changes in prevalence over time were not the result of changes in measurement, we conducted sensitivity analyses. We created a set of adjusted scoring algorithms to maximize comparability among the DISC-IV and WMH-CIDI criteria while minimizing alterations (see eAppendix 1. Maximizing Comparability among Measures, included within this Supplement). Longitudinal analyses of mania, major depression, dysthymia, GAD, and PTSD were conducted twice, with and without the adjusted criteria. Because there were no substantial differences in findings and to enable comparisons with other studies, we present the results using the original, unadjusted diagnoses.

Beginning with the first follow-up interview, we administered the Diagnostic Interview Schedule, version IV (DIS-IV)^{21,22} because the DISC 2.3 was not sufficiently comprehensive to cover the substance use behaviors of aging delinquent youth. The DIS-IV assesses substance use disorders in the year before the interview for alcohol, marijuana, and the following “other” illicit drug disorders: amphetamines, sedatives, cocaine, opiates, PCP, hallucinogens, inhalants, and unspecified drugs. Consistent with *DSM-IV*,²⁷ additional impairment was not required for a diagnosis of substance use disorder. Consistent with the National Comorbidity Survey Replication,²³ participants who met criteria for substance use disorder with “partial recovery” were scored as having the disorder. We did not implement *DSM-IV* exclusionary criteria. In our prior work,²⁵ we checked that changes in prevalence over time from baseline to follow-up interviews were not due to changes in measurement from the DISC 2.3 to the DIS-IV.

Incarceration

Incarceration variables are based on data from official records. We obtained intake and exit dates for correctional stays from the Illinois Department of Corrections adult and youth divisions, the Cook County Department of Corrections, and the Clerk of the Court of Cook County (for stays in the Cook County Juvenile Temporary Detention Center). Because it was not feasible to collect records for those in federal prisons, out-of-state prisons, and detention facilities outside of Cook County, dates for stays in these facilities are based on self-report (<2.67% of stays).

We matched official records to participants using names, known aliases, race/ethnicity, birth dates, and institutional ID numbers. Throughout the course of the study, we routinely updated identifying information each time a participant was contacted or interviewed. We also routinely updated institutional IDs every time a participant was interviewed in a correctional setting or discovered to be incarcerated through multiple mailings sent to participants each year of the study.

We generated the following variables at each follow-up interview: length of time incarcerated in the past year (days), an indicator variable for having been incarcerated during the entire past year (yes/no), and an indicator variable for living in the community during the entire past year (yes/no). For follow-up interviews, we used incarceration information from the year preceding the interview date to match the measurement period for substance

use disorders. For baseline (when substance use disorders were assessed in the past 6 months), we generated analogous variables using time incarcerated in the past 90 days, the best available estimate.

Specific Time Points for Prevalence Estimates

Three-year: This is the first follow-up interview but excludes interviews that occurred more than 18 months after the interview due date. Using a narrower window would restrict the generalizability of the findings because in this high-risk and mobile sample, participants can be difficult to track. Median time between baseline and the 3-year interview was 3.0 years (mean [SD], 3.2 [0.3] years; range, 2.7-4.5 years); 91% of study participants had a 3-year interview. Dates for these interviews spanned 1998-2002.

Five-year: This is the earliest follow-up interview that occurred approximately 5 years after baseline. As with the 3-year interview, interviews that occurred more than 18 months after the interview due date were excluded. The median time between baseline and the 5-year interview was 4.7 years (mean [SD], 4.9 [0.4]; range, 4.3-6.0 years). To ensure that prevalence estimates reflect temporally distinct cross-sections of the sample, we required at least 16 months between the 3- and 5-year interviews; 85% of study participants had a 5-year interview. Dates for these interviews spanned 2000-2004.

Six-year: This is the follow-up interview that occurred approximately 6 years after baseline. Interviews that occurred more than 24 months after the due date were excluded. We used 24 months rather than 18 months to reduce the risk of systematic bias while allowing for a reasonably narrow follow-up window. During this time period, limited funding made it more difficult to conduct interviews on time, particularly for transient and difficult-to-locate participants. In addition, interviews were scheduled to occur less frequently, which makes locating participants more difficult. The median time between baseline and the 6-year interview was 6.4 years (mean [SD], 6.5 [0.5]; range, 5.8-8.0 years). As before, to ensure that prevalence estimates reflect temporally distinct cross-sections of the sample, we required at least 16 months between the 5- and 6-year interviews; 77% of study participants had a 6-year interview. Dates for these interviews spanned 2002-2006.

Eight-year: This is the follow-up interview that occurred approximately 8 years after baseline. As with the 6-year window, interviews that occurred more than 24 months after due date were excluded. The median time between baseline and the 8-year interview was 8.6 years (mean [SD], 8.6 [0.5]; range, 7.8-10.0 years). Again, we required at least 16 months between the 6- and 8-year interviews; 73% of study participants had an 8-year interview. Dates for these interviews spanned 2003-2008.

Twelve-year: This is the follow-up interview that occurred approximately 12 years after baseline. As with the interviews at 3 and 5 years, interviews that occurred more than 18 months after the 12-year follow-up interview due date were excluded. The window for this time period was reduced to 18 months because more frequent interview waves were planned and we were able to capture most of the interviewed participants within this range. The median time between baseline and the 12-year interview was 12.2 years (mean [SD], 12.3 [0.3]; range, 11.8-13.5 years). We required at least 16 months between the 8- and 12-year interviews; 83% of study participants had a 12-year interview. Dates for these interviews spanned 2007-2011.

Fourteen-year: This is the follow-up interview that occurred approximately 14 years after baseline. Interviews that occurred more than 12 months after the 14-year follow-up interview due date were excluded. The window for this time period was reduced to 12 months, as more frequent interview waves were planned and we were able to capture most of the interviewed participants within this range. The median time between baseline and the 14-year interview was 12.2 years (mean [SD], 14.1 [0.2]; range, 13.7-15.0 years). We required at least 8.75 months between the 12- and 14-year interviews; 79% of study participants had a 14-year interview. Dates for these interviews spanned 2009-2013.

Fifteen-year: This is the follow-up interview that occurred approximately 15 years after baseline. Interviews that occurred more than 12 months after the 15-year follow-up interview due date were excluded. The window for this time period was reduced to 12 months, as more frequent interview waves were planned and we were able to capture most of the interviewed participants within this range. The median time between baseline and the 15-year interview was 12.2 years (mean [SD], 15.2 [0.2]; range, 14.8-16.0 years). We required at least 8.75 months between the 14-year and 15-year interviews; 77% of study participants had a 15-year interview. Dates for these interviews spanned 2010-2014.

GEE Models for Changes in Psychiatric Disorders Over Time

We used all available interviews, with an average of 9 interviews per person (range, 1-13 interviews per person). Four participants who identified as “other” race/ethnicity were excluded. We also included a linear term for age at baseline (10-18 years). For all disorders except ASPD, we included restricted cubic splines with 3 interior knots to account for time since baseline (aging). For ASPD, we used linear and quadratic terms for time since the 6-year interview, when all participants were 18 years or older. When main effects were significant, we estimated models with the corresponding interaction terms. Only statistically significant interaction terms were included in final models.

Disorder was modeled as binomial with a logit link function. We used a robust sandwich estimator with an unstructured correlation matrix; in the instances in which models failed to converge, we specified an exchangeable correlation structure (comorbid disorder, any disorder without behavioral, any anxiety disorder, generalized anxiety disorder, PTSD, and any behavioral disorder).

Because incarceration may restrict access to substances, all substance use disorder models (any substance use disorder, alcohol use disorder, drug use disorder) included the length of time incarcerated (days) and indicators for living entirely in the community (yes/no) or entirely in corrections (yes/no) during the past year. For substance use disorders measured at the baseline interview (and therefore assessed in the past 6 months), we used time incarcerated in the past 90 days, the best available estimate.

Missing Data

Item Nonresponse

At the 6-year interview, 411 participants are missing diagnosis of PTSD because of a programming error in the PTSD module of the WMH-CIDI. At the 8-year interview, 110 participants are missing ASPD diagnosis because of interview administration errors. We multiply imputed these missing values based on demographic characteristics (sex, race/ethnicity, legal status, age at baseline) and the participant’s diagnosis at their previous interview.²⁸⁻³⁰ For the following disorders, prevalence estimates in all figures and tables and GEE models are based on these multiply imputed values: any disorder (≥ 1), comorbid disorder (≥ 2), any disorder without behavioral, any internalizing disorder, any anxiety disorder, PTSD, any behavioral disorder, and ASPD.

Attrition

To assess the effect of attrition on generalizability, we compared demographic characteristics of participants who received a 15-year interview with those who did not. Females were more likely to be retained 15 years after detention compared with males (odds ratio [OR], 1.77; 95% CI, 1.39-2.26). African Americans were more likely to be retained 15 years after detention compared with non-Hispanic whites (OR, 1.82; 95% CI, 1.36-2.45) and Hispanics (OR, 1.49; 95% CI, 1.16-1.92). Potential bias from demographic differences in attrition was adjusted by weighting the statistical analyses by sampling strata.

We also compared participants who provided follow-up data 15 years after detention with those who did not on all psychiatric disorders at baseline. There were no significant differences.

eMethods 2. Maximizing Comparability Among Measures: Changes to Scoring Algorithms for Testing Results¹

Comparison of DISC-IV (FUP1-4) With the WMH-CIDI (FUP5+) and DIS IV (FUP5+)

| Disorder | Measures | Differences Between Measures | Changes to Scoring Algorithms |
|------------------|----------------------------------|---|--|
| Mania | DISC-IV and WMH-CIDI | <ul style="list-style-type: none"> Both measures assess impairment (interference with normal functioning), but the WMH includes 2 additional components of impairment that are not included in the DISC-IV: hospitalization and psychosis The WMH rules out mania resulting from physiological effects of a substance or a general medical condition | <ul style="list-style-type: none"> Removed 2 impairment questions from the WMH (hospitalization and psychosis) Disabled physiological/medical rule outs (Criterion E) for the WMH |
| Hypomania | DISC-IV and WMH-CIDI | <ul style="list-style-type: none"> The WMH asks whether symptoms interfere with activities of daily living Both measures assess impairment (interference with normal functioning), but the WMH includes 2 additional components of impairment that are not included in the DISC-IV: hospitalization and psychosis The WMH rules out hypomania resulting from physiological effects of a substance or a general medical condition | <ul style="list-style-type: none"> Disabled interference questions (Criterion C) for the WMH Removed 3 impairment questions from the WMH (2 questions about hospitalization and 1 about psychosis) Disabled physiological/medical rule outs (Criterion F) for the WMH |
| Major Depressive | DISC-IV (MDD) and WMH-CIDI (MDE) | <ul style="list-style-type: none"> The WMH includes 4 questions about subjective emotional distress (eg, how severe was emotional distress, how often was distress so severe that nothing could cheer you up, how often was distress so severe that you could not carry out daily activities, did you feel so sad that nothing could cheer you up nearly every day) | <ul style="list-style-type: none"> Removed 4 distress questions from the WMH Disabled physiological/medical rule outs (Criterion D) for the WMH Disabled bereavement rule out (Criterion E) for the DISC-IV |

¹ We created a set of adjusted scoring algorithms to maximize comparability among DISC-IV, WMH-CIDI, and DIS-IV criteria, while minimizing alterations. All analyses were run twice, with and without these adjusted criteria. Because there were no substantive differences in findings and to enable comparisons with other studies, we present results using the original, unadjusted diagnoses.

| Disorder | Measures | Differences Between Measures | Changes to Scoring Algorithms |
|------------------------------------|-------------------------|--|---|
| disorder/ episode ² | | <ul style="list-style-type: none"> • The WMH rules out depression resulting from physiological effects of a substance or a general medical condition • The DISC-IV rules out depression related to bereavement | |
| Dysthymia | DISC-IV and WMH-CIDI | <ul style="list-style-type: none"> • The WMH rules out mania and hypomania • The WMH rules out depressive symptoms resulting from physiological effects of a substance or a general medical condition | <ul style="list-style-type: none"> • Disabled mania/hypomania rule outs (Criterion E) for the WMH • Disabled physiological/medical rule outs (Criterion G) for the WMH |
| Generalized anxiety disorder | DISC-IV and WMH-CIDI | <ul style="list-style-type: none"> • The WMH imposes hierarchy (rules out other Axis I disorders, eg, social phobia, obsessive compulsive disorder, separation anxiety); the DISC-IV does not specifically rule out other disorders • The WMH asks whether anxious feelings caused emotional distress • Both measures establish impairment, but the WMH includes a question about talking to a medical doctor or other professional about the anxiety • The WMH rules out anxiety resulting from physiological effects of a substance, a general medical condition, or that which occurs exclusively during a mood disorder, psychotic disorder, or pervasive developmental disorder | <ul style="list-style-type: none"> • Disabled hierarchy (Criterion D) for the WMH • Removed 2 distress questions from the WMH • Removed question about speaking with a medical professional from the WMH • Disabled physiological/medical rule outs (Criterion F) for the WMH |

² The WMH computes major depressive episode (MDE) and major depressive disorder (MDD) with separate algorithms. MDE includes all of the diagnostic criteria, with the exception of Criterion C (there has never been a manic episode, a mixed episode, or a hypomanic episode). Because Criterion C is not included in the DISC-IV algorithms for MDD, it is not necessary to include it in the WMH algorithms for the comparison. In other words, it is appropriate to compare the DISC-IV MDD diagnosis with the WMH MDE diagnosis.

| Disorder | Measures | Differences Between Measures | Changes to Scoring Algorithms |
|-------------------------------|----------------------|--|--|
| Panic disorder | DISC-IV and WMH-CIDI | <ul style="list-style-type: none"> • No substantive differences | <ul style="list-style-type: none"> • No changes made |
| Posttraumatic stress disorder | DISC-IV and WMH-CIDI | <ul style="list-style-type: none"> • The WMH establishes the duration of disturbance within each symptom cluster (reexperiencing, avoidance, and hyperarousal); the DISC-IV assesses duration of the disturbance with 1 general question after asking about all symptoms | <ul style="list-style-type: none"> • Removed duration questions from each symptom cluster (Criteria B, C, D, and E) of the WMH • Disabled duration requirement (Criterion E) for the DISC-IV |
| Schizophrenia | DISC-IV and DIS-IV | <ul style="list-style-type: none"> • The DIS assess 3 types of hallucinations (smell, taste, and touch) that are not assessed in the DISC-IV • We do not administer Section X of the WMH, which would allow us to assess grossly disorganized or catatonic behavior; instead, we rely on interviewer comments to address these symptoms. The DISC-IV does assess disorganized and catatonic behavior | <ul style="list-style-type: none"> • Removed 3 hallucination questions from the DIS • Removed disorganized behavior (Criterion A, part 4) from the DISC-IV |

Note: The DISC-IV does not impose impairment criteria by default. For the purposes of comparison, we imposed impairment criteria “A” when for all disorders with impairment criteria. Impairment “A” refers to at least 1 “moderate” rating of impairment.

Note: This table presents only those differences between measures where modifications were made to the scoring algorithms. Several differences were identified but not modified either because we were unable to do so (ie, could not add questions or change existing wording) or because we felt, upon consultation, that the differences were justifiable due to age-appropriate developmental differences between children and adults.

eTable 1. Demographic Characteristics and Retention of the Sample Recruited from the Cook County Juvenile Detention Center Between 1995 and 1998^a

| | Baseline | | 3 year | | 5 year | | 6 year | | 8 year | | 12 year | | 14 year | | 15 year | |
|-------------------------------------|-----------------|-------|---------------|-------|---------------|-------|---------------|-------|---------------|-------|----------------|-------|----------------|-------|----------------|-------|
| | (N = 1829) | | (N = 1659) | | (N = 1561) | | (N = 1405) | | (N = 1333) | | (N = 1519) | | (N = 1445) | | (N = 1404) | |
| Characteristic | | (%) | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) | N | (%) |
| Race/ethnicity | | | | | | | | | | | | | | | | |
| African American | 1005 | (55) | 927 | (56) | 893 | (57) | 820 | (58) | 782 | (59) | 879 | (58) | 837 | (58) | 811 | (58) |
| Hispanic | 524 | (29) | 461 | (28) | 423 | (27) | 371 | (26) | 346 | (26) | 410 | (27) | 393 | (27) | 386 | (27) |
| Non-Hispanic white | 296 | (16) | 267 | (16) | 242 | (16) | 211 | (15) | 203 | (15) | 228 | (15) | 213 | (15) | 206 | (15) |
| Other | 4 | (0) | 4 | (0) | 3 | (0) | 3 | (0) | 2 | (0) | 2 | (0) | 2 | (0) | 1 | (0) |
| Sex | | | | | | | | | | | | | | | | |
| Male | 1172 | (64) | 1054 | (64) | 993 | (64) | 893 | (64) | 822 | (62) | 943 | (62) | 896 | (62) | 859 | (61) |
| African American | 575 | (49) | 526 | (50) | 505 | (51) | 463 | (52) | 421 | (51) | 485 | (51) | 462 | (52) | 434 | (51) |
| Hispanic | 387 | (33) | 341 | (32) | 315 | (32) | 279 | (31) | 254 | (31) | 295 | (31) | 281 | (31) | 280 | (33) |
| Non-Hispanic white | 207 | (18) | 184 | (17) | 171 | (17) | 149 | (17) | 145 | (18) | 162 | (17) | 151 | (17) | 144 | (17) |
| Other | 3 | (0) | 3 | (0) | 2 | (0) | 2 | (0) | 2 | (0) | 1 | (0) | 2 | (0) | 1 | (0) |
| Female | 657 | (36) | 605 | (36) | 568 | (36) | 512 | (36) | 511 | (38) | 576 | (38) | 549 | (38) | 545 | (39) |
| African American | 430 | (65) | 401 | (66) | 388 | (68) | 357 | (70) | 361 | (71) | 394 | (68) | 375 | (68) | 377 | (69) |
| Hispanic | 137 | (21) | 120 | (20) | 108 | (19) | 92 | (18) | 92 | (18) | 115 | (20) | 112 | (20) | 106 | (19) |
| Non-Hispanic white | 89 | (14) | 83 | (14) | 71 | (12) | 62 | (12) | 58 | (11) | 66 | (11) | 62 | (11) | 62 | (11) |
| Other | 1 | (0) | 1 | (0) | 1 | (0) | 1 | (0) | 0 | (0) | 1 | (0) | 0 | (0) | 0 | (0) |
| Legal status at detention | | | | | | | | | | | | | | | | |
| Processed in juvenile court | 275 | (15) | 263 | (16) | 244 | (16) | 222 | (16) | 196 | (15) | 230 | (15) | 228 | (16) | 212 | (15) |
| Processed in adult court | 1554 | (85) | 1396 | (84) | 1317 | (84) | 1183 | (84) | 1137 | (85) | 1289 | (85) | 1217 | (84) | 1192 | (85) |
| Age (years) | | | | | | | | | | | | | | | | |
| Mean (Standard deviation) | 14.9 | (1.4) | 18.6 | (1.4) | 20.2 | (1.4) | 21.9 | (1.5) | 24 | (1.5) | 27.6 | (1.4) | 29.6 | (1.4) | 30.6 | (1.4) |
| Median | 15 | | 19 | | 20 | | 22 | | 24 | | 28 | | 30 | | 31 | |
| Nonresponse | | | | | | | | | | | | | | | | |
| Died | – | | 31 | | 50 | | 61 | | 78 | | 97 | | 105 | | 116 | |
| Refused | – | | 5 | | 27 | | 39 | | 46 | | 69 | | 82 | | 82 | |
| Skipped ^b | – | | 42 | | 81 | | 209 | | 241 | | 135 | | 179 | | 197 | |
| Interview out of range ^c | – | | 92 | | 110 | | 115 | | 131 | | 9 | | 18 | | 30 | |
| Interview type | | | | | | | | | | | | | | | | |
| Community | – | | 1071 | (65) | 1021 | (65) | 888 | (63) | 870 | (65) | 1000 | (66) | 954 | (66) | 970 | (69) |
| Incarcerated | – | | 477 | (29) | 453 | (29) | 437 | (31) | 362 | (27) | 306 | (20) | 261 | (18) | 210 | (15) |
| Phone | – | | 72 | (4) | 70 | (4) | 78 | (6) | 100 | (8) | 211 | (14) | 230 | (16) | 223 | (16) |
| Placement | – | | 39 | (2) | 17 | (1) | 2 | (0) | 1 | (0) | 2 | (0) | 0 | (0) | 1 | (0) |

^a Percentages may not sum to 100% due to rounding error.

^b Participant was not located in time to be interviewed for the current wave.

^c These interviews were excluded because (1) they occurred at a time point that was too close to the preceding interview or (2) they occurred after the planned cutoff date (e.g., for the 5-year interview, more than 1.5 years after the planned interview date).

eTable 2. Prevalence of Psychiatric Disorders Over Time: Sex Differences^a

| Disorder | Prevalence, % | | | | | | | | | | | | | | | |
|--|--------------------|----------------|---------------|---------------|---------------|----------------|----------------|----------------|-------------------|---------------|---------------|---------------|---------------|----------------|----------------|----------------|
| | Males | | | | | | | Females | | | | | | | | |
| | Baseline n=1167 | 3 yr n=1050 | 5 yr n=991 | 6 yr n=889 | 8 yr n=820 | 12 yr n=934 | 14 yr n=887 | 15 yr n=855 | Baseline n=655 | 3 yr n=604 | 5 yr n=567 | 6 yr n=510 | 8 yr n=507 | 12 yr n=574 | 14 yr n=543 | 15 yr n=541 |
| Any disorder (≥1) ^b | 64.5 | 61.8 | 58.5 | 55.3 | 58.4 | 54.8 | 54.0 | 52.3 | 68.4 | 53.1 | 46.6 | 50.5 | 52.4 | 45.4 | 35.0 | 30.9 |
| Comorbid disorder (≥2) ^b | 39.9 | 37.3 | 31.5 | 25.3 | 29.0 | 17.9 | 15.3 | 16.0 | 46.1 | 27.9 | 18.1 | 21.0 | 26.8 | 17.8 | 13.4 | 11.6 |
| Any disorder, except behavioral ^b | 63.4 | 50.0 | 41.4 | 35.8 | 36.6 | 28.0 | 23.1 | 25.4 | 65.1 | 41.1 | 32.4 | 35.7 | 42.5 | 28.5 | 22.4 | 20.7 |
| Any internalizing disorder ^b | 23.2 | 20.8 | 13.2 | 9.9 | 14.9 | 11.7 | 9.8 | 12.4 | 31.6 | 24.9 | 16.0 | 18.3 | 23.0 | 13.6 | 12.5 | 13.3 |
| Any mood disorder | 15.8 | 14.8 | 8.7 | 4.4 | 9.8 | 7.3 | 8.2 | 9.9 | 21.4 | 17.4 | 12.2 | 6.9 | 15.5 | 8.4 | 7.9 | 7.9 |
| Mania | 2.0 | 0.5 | 0.7 | 2.1 | 3.0 | 1.9 | 2.3 | 2.4 | 1.2 | 1.6 | 1.5 | 2.3 | 4.7 | 2.1 | 2.0 | 2.5 |
| Major depression | 11.1 | 9.0 | 6.4 | 2.3 | 5.6 | 4.3 | 5.5 | 6.9 | 17.4 | 13.0 | 10.5 | 4.6 | 10.0 | 6.1 | 5.7 | 5.2 |
| Hypomania | 2.1 | 6.3 | 2.1 | 0.02 | 1.1 | 0.6 | 0.0 | 0.6 | 0.3 | 4.2 | 0.8 | 0.0 | 0.6 | 0.2 | 0.0 | 0.0 |
| Dysthymia | 9.9 | 1.1 | 0.9 | 0.1 | 2.3 | 1.8 | 2.3 | 2.6 | 12.7 | 1.6 | 0.7 | 0.4 | 4.1 | 2.2 | 1.5 | 3.4 |
| Any anxiety disorder ^b | 10.9 | 10.5 | 8.2 | 6.9 | 7.0 | 5.5 | 2.2 | 3.5 | 16.5 | 13.1 | 8.5 | 13.7 | 11.0 | 7.4 | 6.3 | 8.4 |
| Generalized anxiety disorder | 3.8 | 2.6 | 1.9 | 3.2 | 3.4 | 1.5 | 1.3 | 0.1 | 5.2 | 3.3 | 2.2 | 1.5 | 1.7 | 1.3 | 0.7 | 1.0 |
| Panic disorder | 0.3 | 2.2 | 1.0 | 1.7 | 1.3 | 0.8 | 0.3 | 0.5 | 1.5 | 3.1 | 1.2 | 1.8 | 2.0 | 1.7 | 1.3 | 1.5 |
| Posttraumatic stress disorder ^b | 8.0 | 7.6 | 5.5 | 3.2 | 2.2 | 3.4 | 0.7 | 3.1 | 11.5 | 8.0 | 6.0 | 10.4 | 7.7 | 5.0 | 4.2 | 6.7 |
| Attention-deficit/hyperactivity disorder, age <18 yr ^c | 11.3 | 5.8 | 4.1 | — | — | — | — | — | 16.7 | 9.7 | 0.0 | — | — | — | — | — |
| Any disruptive behavior disorder ^d | 29.5 | 38.5 | 41.8 | 38.8 | 47.8 | 41.5 | 43.3 | 38.6 | 33.4 | 29.4 | 26.2 | 28.3 | 24.7 | 29.4 | 21.2 | 14.8 |
| Conduct disorder, age <18 yr ^c | 24.4 | 20.1 | 9.3 | — | — | — | — | — | 27.2 | 13.5 | 4.3 | — | — | — | — | — |
| Oppositional defiant disorder, age <18 yr ^c | 12.7 | 15.9 | 9.8 | — | — | — | — | — | 15.4 | 9.1 | 4.0 | — | — | — | — | — |
| Antisocial personality disorder, age 18 yr or older ^e | — | 41.3 | 42.5 | 38.8 | 47.8 | 41.5 | 43.3 | 38.6 | — | 32.0 | 26.8 | 28.4 | 24.7 | 29.4 | 21.2 | 14.8 |
| Any substance use disorder | 50.8 | 37.4 | 32.7 | 28.1 | 28.3 | 19.9 | 16.0 | 16.1 | 45.9 | 23.3 | 21.1 | 20.7 | 27.0 | 18.2 | 12.4 | 9.9 |
| Alcohol use disorder | 25.9 | 19.2 | 19.5 | 14.4 | 15.8 | 14.4 | 10.0 | 10.4 | 25.2 | 10.8 | 8.8 | 10.5 | 14.0 | 9.5 | 6.4 | 4.8 |
| Drug use disorder | 45.6 | 29.9 | 23.3 | 21.5 | 22.3 | 10.4 | 8.7 | 8.9 | 41.2 | 17.0 | 15.7 | 15.3 | 19.2 | 11.5 | 7.5 | 5.9 |

Abbreviations: yr, year; —, variable unavailable at time point

^a Descriptive statistics are weighted to adjust for sampling design and reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center. Participants who identified as "other" race/ethnicity (n = 4) are excluded from the table. In column heads, n refers to the number of participants who completed the diagnostic interview at that time point.

^b At baseline, assessed for males (n = 514) and females (n = 349) who were interviewed after the posttraumatic stress disorder module became available.

^c Assessed for participants younger than 18 years at baseline (all participants), 3 year (n = 348 males and n = 148 females), and 5 year (n = 96 males and n = 21 females). There were too few participants (n = 13) less than 18 years of age at the 6-year interview to report prevalence estimates.

^d For participants younger than 18 years, any disruptive behavior disorder is defined as having conduct disorder or oppositional defiant disorder. For participants aged 18 years or older, it is defined as having antisocial personality disorder.

^e Assessed at all follow-up interviews for participants aged 18 years or older; not assessed at baseline because the sample consisted of juveniles.

eTable 3. Prevalence of Psychiatric Disorders Over Time: Racial/Ethnic Differences Among Males

| Disorder | Prevalence, % | | | | | | | | | | | | | | | | | | | | | | | |
|---|------------------|-------|-------|-------|-------|-------|-------|-------|----------|-------|-------|-------|-------|-------|-------|-------|--------------------|-------|-------|-------|-------|-------|-------|-------|
| | African American | | | | | | | | Hispanic | | | | | | | | Non-Hispanic White | | | | | | | |
| | Baseline | 3 yr | 5 yr | 6 yr | 8 yr | 12 yr | 14 yr | 15 yr | Baseline | 3 yr | 5 yr | 6 yr | 8 yr | 12 yr | 14 yr | 15 yr | Baseline | 3 yr | 5 yr | 6 yr | 8 yr | 12 yr | 14 yr | 15 yr |
| n=574 | n=525 | n=505 | n=461 | n=421 | n=483 | n=457 | n=433 | n=386 | n=341 | n=315 | n=279 | n=254 | n=292 | n=279 | n=279 | n=207 | n=184 | n=171 | n=149 | n=145 | n=159 | n=151 | n=143 | |
| Any disorder (≥1) ^b | 62.6 | 60.8 | 57.1 | 52.8 | 58.3 | 54.4 | 53.6 | 51.3 | 67.9 | 61.3 | 59.2 | 61.0 | 56.9 | 56.3 | 54.1 | 52.6 | 80.6 | 76.7 | 78.4 | 75.7 | 65.1 | 56.3 | 60.2 | 67.2 |
| Comorbid disorder (≥2) ^b | 37.3 | 36.1 | 30.4 | 23.4 | 28.0 | 16.7 | 15.1 | 14.3 | 47.9 | 41.2 | 31.9 | 28.5 | 30.4 | 20.7 | 15.6 | 21.9 | 55.6 | 44.6 | 46.7 | 44.7 | 39.9 | 26.6 | 17.3 | 25.8 |
| Any disorder, except behavioral ^b | 61.9 | 49.2 | 38.9 | 32.9 | 34.4 | 25.9 | 22.2 | 23.1 | 65.6 | 50.6 | 46.5 | 43.2 | 42.0 | 35.1 | 25.6 | 31.1 | 77.5 | 59.6 | 62.4 | 58.1 | 53.7 | 38.5 | 28.6 | 41.3 |
| Any internalizing disorder ^b | 21.8 | 20.4 | 13.5 | 9.7 | 14.0 | 10.1 | 9.6 | 12.8 | 31.5 | 23.7 | 12.1 | 9.4 | 19.5 | 18.6 | 11.9 | 10.6 | 16.8 | 17.3 | 12.7 | 15.3 | 15.2 | 13.4 | 7.5 | 12.4 |
| Any mood disorder | 15.4 | 15.3 | 9.0 | 4.5 | 9.2 | 6.6 | 8.0 | 10.1 | 18.9 | 13.5 | 7.5 | 2.6 | 12.9 | 10.5 | 9.8 | 9.0 | 12.3 | 11.3 | 7.3 | 8.4 | 10.0 | 7.6 | 6.8 | 8.9 |
| Mania | 2.3 | 0.2 | 0.5 | 2.0 | 2.8 | 1.5 | 1.5 | 2.2 | 1.3 | 2.0 | 1.7 | 1.7 | 3.9 | 4.0 | 5.8 | 3.5 | 0.0 | 0.6 | 0.0 | 5.9 | 4.0 | 2.1 | 2.8 | 1.9 |
| Major depression | 10.5 | 9.1 | 6.7 | 2.5 | 5.2 | 4.0 | 5.9 | 7.3 | 14.6 | 9.2 | 5.8 | 0.9 | 7.7 | 6.0 | 4.0 | 5.0 | 9.5 | 7.6 | 4.6 | 2.2 | 5.2 | 3.5 | 4.0 | 6.7 |
| Hypomania | 1.9 | 6.9 | 2.1 | 0.0 | 1.2 | 0.5 | 0.0 | 0.6 | 3.4 | 4.3 | 2.0 | 0.0 | 0.8 | 0.5 | 0.0 | 0.5 | 1.0 | 3.3 | 3.3 | 0.4 | 0.8 | 1.4 | 0.0 | 0.3 |
| Dysthymia | 9.7 | 1.1 | 1.0 | 0.1 | 2.5 | 1.7 | 2.4 | 2.8 | 11.3 | 0.9 | 0.0 | 0.2 | 1.3 | 2.2 | 2.2 | 1.2 | 8.4 | 0.9 | 0.7 | 0.0 | 1.6 | 1.4 | 0.7 | 4.0 |
| Any anxiety disorder ^b | 9.1 | 9.3 | 8.6 | 6.7 | 6.6 | 4.8 | 1.7 | 3.6 | 19.3 | 17.2 | 6.8 | 7.7 | 8.3 | 8.7 | 4.1 | 3.1 | 9.8 | 8.5 | 6.8 | 9.3 | 7.8 | 6.5 | 4.0 | 3.5 |
| Generalized anxiety disorder | 3.7 | 2.7 | 2.2 | 3.4 | 3.8 | 1.3 | 1.3 | 0.0 | 5.0 | 2.4 | 0.5 | 2.3 | 2.2 | 2.5 | 1.6 | 0.4 | 2.0 | 1.7 | 0.8 | 1.6 | 1.6 | 1.0 | 0.7 | 0.0 |
| Panic disorder | 0.1 | 1.4 | 0.8 | 1.7 | 0.9 | 0.6 | 0.1 | 0.4 | 1.0 | 5.2 | 1.6 | 1.3 | 2.6 | 1.4 | 0.4 | 0.8 | 0.5 | 4.4 | 3.0 | 3.5 | 3.3 | 2.1 | 2.5 | 0.8 |
| Posttraumatic stress disorder ^b | 6.2 | 6.7 | 5.6 | 2.9 | 1.8 | 2.9 | 0.4 | 3.3 | 16.0 | 13.1 | 5.6 | 4.4 | 4.3 | 5.3 | 2.1 | 2.1 | 7.0 | 3.8 | 2.6 | 4.4 | 2.7 | 4.8 | 1.5 | 2.7 |
| Attention-deficit/hyperactivity disorder, age <18 yr ^c | 11.6 | 5.0 | 4.4 | — | — | — | — | — | 8.0 | 8.2 | 3.8 | — | — | — | — | — | 16.4 | 13.8 | — | — | — | — | — | — |
| Any disruptive behavior disorder ^d | 26.7 | 37.3 | 41.0 | 37.9 | 48.8 | 42.4 | 43.6 | 38.2 | 35.5 | 39.3 | 39.6 | 39.7 | 42.6 | 37.0 | 41.4 | 37.6 | 52.8 | 53.5 | 59.7 | 50.3 | 46.9 | 42.1 | 44.2 | 48.6 |
| Conduct disorder, age <18 yr ^c | 20.7 | 15.3 | 8.2 | — | — | — | — | — | 33.6 | 43.7 | 18.4 | — | — | — | — | — | 51.9 | 32.8 | — | — | — | — | — | — |
| Oppositional defiant disorder, age <18 yr ^c | 12.6 | 16.3 | 10.8 | — | — | — | — | — | 12.3 | 13.4 | 6.9 | — | — | — | — | — | 16.0 | 15.6 | — | — | — | — | — | — |
| Antisocial personality disorder, age 18 yr or older ^e | — | 41.1 | 41.8 | 37.9 | 48.8 | 42.4 | 43.6 | 38.2 | — | 37.7 | 40.1 | 39.6 | 42.6 | 37.0 | 41.4 | 37.6 | — | 55.4 | 60.9 | 50.1 | 46.9 | 42.1 | 44.2 | 48.6 |
| Any substance use disorder | 49.1 | 35.5 | 30.0 | 26.0 | 26.4 | 19.4 | 15.1 | 13.6 | 55.4 | 42.6 | 38.9 | 31.8 | 32.3 | 18.2 | 18.4 | 22.3 | 62.6 | 49.9 | 53.6 | 48.6 | 45.7 | 31.6 | 22.8 | 34.3 |
| Alcohol use disorder | 24.6 | 18.2 | 18.1 | 12.7 | 15.0 | 14.5 | 9.6 | 8.5 | 30.8 | 20.5 | 21.4 | 17.0 | 17.2 | 12.1 | 10.9 | 15.7 | 30.3 | 30.6 | 33.3 | 33.5 | 25.0 | 21.3 | 12.8 | 21.4 |
| Drug use disorder | 44.9 | 28.0 | 21.5 | 20.4 | 21.4 | 9.7 | 7.9 | 7.4 | 45.7 | 35.6 | 28.2 | 23.5 | 23.9 | 11.5 | 11.6 | 13.2 | 56.1 | 40.7 | 36.0 | 33.1 | 31.4 | 18.1 | 11.3 | 17.2 |

Abbreviations: yr, year; —, variable unavailable at time point

^a Descriptive statistics are weighted to adjust for sampling design and reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center. Participants who identified as "other" race/ethnicity (n = 4) are excluded from the table. In column heads, n refers to the number of participants who completed the diagnostic interview at that time point.

^b At baseline, assessed for African American males (n = 239), Hispanic males (n = 106), and non-Hispanic white males (n = 169) who were interviewed after the posttraumatic stress disorder module became available.

^c Assessed for participants younger than 18 years at baseline (all participants), 3 year (n = 200 African American males, n = 108 Hispanic males, n = 40 non-Hispanic white males), and 5 year (n = 59 African American males, n = 27 Hispanic males). There were too few non-Hispanic white males (n = 10) less than 18 years of age at the 5-year interview to report prevalence estimates. There were too few males (n = 11) less than 18 years of age at the 6-year interview to report prevalence estimates.

^d For participants younger than 18 years, any disruptive behavior disorder is defined as having conduct disorder or oppositional defiant disorder. For participants aged 18 years or older, it is defined as having antisocial personality disorder.

^e Assessed at all follow-up interviews for participants aged 18 years or older; not assessed at baseline because the sample consisted of juveniles.

eTable 4. Prevalence of Psychiatric Disorders Over Time: Racial/Ethnic Differences Among Females

| Disorder | Prevalence, % | | | | | | | | | | | | | | | | | | | | | | | |
|---|------------------|-------|-------|-------|-------|-------|-------|-------|----------|-------|------|------|-------|-------|-------|-------|--------------------|------|------|------|------|-------|-------|-------|
| | African American | | | | | | | | Hispanic | | | | | | | | Non-Hispanic White | | | | | | | |
| | Baseline | 3 yr | 5 yr | 6 yr | 8 yr | 12 yr | 14 yr | 15 yr | Baseline | 3 yr | 5 yr | 6 yr | 8 yr | 12 yr | 14 yr | 15 yr | Baseline | 3 yr | 5 yr | 6 yr | 8 yr | 12 yr | 14 yr | 15 yr |
| n=430 | n=401 | n=388 | n=356 | n=360 | n=394 | n=370 | n=376 | n=136 | n=120 | n=108 | n=92 | n=91 | n=114 | n=112 | n=104 | n=89 | n=83 | n=71 | n=62 | n=56 | n=66 | n=61 | n=61 | |
| Any disorder (≥1) ^b | 65.2 | 49.8 | 43.2 | 47.4 | 51.1 | 43.8 | 35.8 | 29.7 | 77.7 | 59.6 | 50.0 | 54.9 | 47.7 | 44.9 | 27.5 | 29.9 | 75.8 | 66.2 | 65.9 | 65.0 | 69.8 | 58.3 | 43.4 | 42.1 |
| Comorbid disorder (≥2) ^b | 42.1 | 26.6 | 15.0 | 17.5 | 25.0 | 17.3 | 12.3 | 11.1 | 53.5 | 28.8 | 23.0 | 27.9 | 27.3 | 13.0 | 12.5 | 10.4 | 62.4 | 35.8 | 32.1 | 34.0 | 38.7 | 30.1 | 23.5 | 18.0 |
| Any disorder, except behavioral ^b | 62.6 | 37.2 | 29.9 | 32.1 | 41.3 | 26.8 | 22.1 | 19.5 | 72.2 | 48.5 | 34.6 | 43.3 | 38.2 | 26.8 | 18.6 | 21.7 | 71.6 | 56.6 | 47.3 | 49.4 | 57.9 | 43.8 | 31.4 | 27.3 |
| Any internalizing disorder ^b | 31.2 | 24.3 | 15.9 | 16.8 | 22.7 | 11.3 | 13.0 | 13.2 | 36.8 | 29.0 | 17.6 | 25.0 | 21.3 | 14.9 | 10.9 | 13.8 | 25.2 | 23.0 | 14.0 | 17.9 | 27.9 | 28.9 | 11.5 | 12.7 |
| Any mood disorder | 20.4 | 17.2 | 11.9 | 6.2 | 15.5 | 7.4 | 7.6 | 8.3 | 24.2 | 18.3 | 14.6 | 12.1 | 14.1 | 7.8 | 8.0 | 7.9 | 23.4 | 16.9 | 10.7 | 3.3 | 17.2 | 16.9 | 9.9 | 5.5 |
| Mania | 1.2 | 2.0 | 1.3 | 1.7 | 4.7 | 2.0 | 1.6 | 3.0 | 1.4 | 0.7 | 2.7 | 6.4 | 3.3 | 2.6 | 0.9 | 2.0 | 1.1 | 0.0 | 1.4 | 0.0 | 6.9 | 1.5 | 6.6 | 0.0 |
| Major depression | 16.7 | 12.0 | 10.6 | 4.5 | 10.0 | 5.1 | 5.7 | 5.2 | 19.7 | 16.5 | 11.2 | 5.7 | 9.7 | 5.2 | 7.1 | 5.0 | 19.0 | 13.8 | 8.4 | 3.3 | 10.3 | 15.4 | 3.3 | 5.5 |
| Hypomania | 0.2 | 4.3 | 0.5 | 0.0 | 0.6 | 0.3 | 0.0 | 0.0 | 0.7 | 2.6 | 1.8 | 0.0 | 1.1 | 0.0 | 0.0 | 0.0 | 0.0 | 6.0 | 1.4 | 0.0 | 0.0 | 0.0 | 0.0 | 0.0 |
| Dysthymia | 11.3 | 1.8 | 0.5 | 0.0 | 4.1 | 2.0 | 1.9 | 3.0 | 15.8 | 0.8 | 0.9 | 1.1 | 5.4 | 0.9 | 0.0 | 4.0 | 17.9 | 1.3 | 1.5 | 1.7 | 1.7 | 6.0 | 1.7 | 5.5 |
| Any anxiety disorder ^b | 14.6 | 13.2 | 8.5 | 12.8 | 10.4 | 5.6 | 7.0 | 8.3 | 27.1 | 17.9 | 10.7 | 17.4 | 11.4 | 9.7 | 4.7 | 8.9 | 10.7 | 4.6 | 5.3 | 14.5 | 14.5 | 16.9 | 3.3 | 9.1 |
| Generalized anxiety disorder | 4.7 | 3.1 | 2.3 | 1.8 | 1.8 | 1.0 | 0.5 | 1.1 | 8.5 | 5.6 | 3.3 | 1.1 | 1.1 | 0.0 | 0.9 | 1.0 | 3.3 | 1.5 | 0.0 | 0.0 | 1.8 | 6.0 | 1.6 | 0.0 |
| Panic disorder | 0.9 | 2.7 | 0.9 | 1.8 | 1.2 | 1.3 | 1.4 | 1.1 | 2.8 | 6.4 | 2.2 | 1.1 | 2.2 | 2.6 | 0.9 | 2.0 | 3.4 | 0.0 | 1.8 | 3.4 | 7.2 | 3.0 | 1.7 | 3.6 |
| Posttraumatic stress disorder ^b | 10.6 | 8.8 | 6.1 | 9.1 | 7.8 | 3.8 | 5.1 | 6.6 | 16.8 | 7.6 | 7.6 | 16.4 | 7.7 | 8.0 | 2.9 | 6.9 | 8.6 | 3.6 | 2.8 | 9.9 | 6.9 | 7.9 | 0.0 | 7.3 |
| Attention-deficit/hyperactivity disorder, age <18 yr ^c | 15.8 | 9.7 | — | — | — | — | — | — | 20.5 | 3.7 | — | — | — | — | — | — | 16.8 | — | — | — | — | — | — | — |
| Any disruptive behavior disorder ^d | 27.7 | 27.8 | 22.4 | 25.5 | 22.9 | 30.0 | 21.4 | 14.5 | 44.9 | 33.1 | 28.9 | 32.0 | 28.5 | 26.7 | 17.3 | 13.4 | 54.4 | 34.4 | 49.0 | 40.9 | 30.8 | 30.2 | 27.6 | 20.3 |
| Conduct disorder, age <18 yr ^c | 22.0 | 13.8 | — | — | — | — | — | — | 35.9 | 7.5 | — | — | — | — | — | — | 49.4 | — | — | — | — | — | — | — |
| Oppositional defiant disorder, age <18 yr ^c | 13.7 | 10.1 | — | — | — | — | — | — | 21.0 | 6.0 | — | — | — | — | — | — | 18.0 | — | — | — | — | — | — | — |
| Antisocial personality disorder, age 18 yr or older ^e | — | 29.9 | 23.2 | 25.7 | 22.9 | 30.0 | 21.4 | 14.5 | — | 38.5 | 29.2 | 32.0 | 28.5 | 26.7 | 17.3 | 13.4 | — | 36.2 | 48.9 | 40.9 | 30.8 | 30.2 | 27.6 | 20.3 |
| Any substance use disorder | 42.3 | 20.2 | 18.7 | 18.0 | 25.0 | 18.2 | 11.2 | 8.8 | 51.7 | 25.8 | 22.4 | 25.0 | 25.8 | 16.8 | 10.7 | 9.9 | 61.9 | 41.4 | 35.4 | 33.2 | 42.7 | 20.6 | 24.8 | 17.9 |
| Alcohol use disorder | 21.2 | 8.6 | 8.7 | 8.0 | 13.3 | 8.8 | 5.4 | 4.0 | 34.0 | 15.4 | 8.3 | 16.6 | 13.5 | 9.8 | 5.5 | 6.0 | 39.2 | 19.2 | 9.9 | 18.3 | 19.9 | 14.0 | 14.6 | 8.2 |
| Drug use disorder | 38.0 | 15.4 | 12.8 | 12.7 | 16.9 | 12.2 | 7.0 | 5.6 | 45.4 | 16.1 | 20.2 | 18.6 | 17.8 | 8.7 | 6.9 | 4.9 | 56.7 | 30.0 | 29.3 | 27.7 | 37.4 | 10.7 | 11.6 | 9.8 |

Abbreviations: yr, year; —, variable unavailable at time point

^a Descriptive statistics are weighted to adjust for sampling design and reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center. Participants who identified as "other" race/ethnicity (n = 4) are excluded from the table. In column heads, n refers to the number of participants who completed the diagnostic interview at that time point.

^b At baseline, assessed for African American females (n = 228), Hispanic females (n = 75), and non-Hispanic white females (n = 46) who were interviewed after the posttraumatic stress disorder module became available.

^c Assessed for participants younger than 18 years at baseline (all participants) and 3 year (n = 101 African American females, n = 32 Hispanic females). There were too few non-Hispanic white females (n = 15) less than 18 years of age at the 3-year interview to report prevalence estimates. There were too few African American females (n = 15), Hispanic females (n = 4), and non-Hispanic white females (n = 2) less than 18 years of age at the 5-year interview to report prevalence estimates. There were too few females (n = 2) less than 18 years of age at the 6-year interview to report prevalence estimates.

^d For participants younger than 18 years, any disruptive behavior disorder is defined as having conduct disorder or oppositional defiant disorder. For participants aged 18 years or older, it is defined as having antisocial personality disorder.

^e Assessed at all follow-up interviews for participants aged 18 years or older; not assessed at baseline because the sample consisted of juveniles.

eTable 5. Odds Ratios Describing Demographic Differences in the Prevalence of Selected Psychiatric Disorders from Detention (Baseline) Through the 15-year Time Point^a

| Variable | Any Disorder | | Comorbid Disorder | | Any Disorder, Except Behavioral | |
|---------------------------------------|--------------|--------------|-------------------|--------------|---------------------------------|--------------|
| | AOR | 95% CI | AOR | 95% CI | AOR | 95% CI |
| Main effects | | | | | | |
| Race/ethnicity | | | | | | |
| W vs AA | 1.91 | (1.56, 2.34) | 1.77 | (1.44, 2.17) | 1.96 | (1.60, 2.40) |
| W vs H | 1.69 | (1.28, 2.22) | 1.39 | (1.12, 1.74) | 1.42 | (1.11, 1.81) |
| H vs AA | 1.13 | (0.87, 1.47) | 1.27 | (1.02, 1.58) | 1.38 | (1.09, 1.75) |
| Main effects with interactions | | | | | | |
| Sex (M vs F) | | | | | | |
| At baseline | 0.99 | (0.68, 1.43) | 0.80 | (0.62, 1.03) | 1.03 | (0.70, 1.51) |
| 3 years after baseline | 1.41 | (1.13, 1.76) | 1.77 | (1.40, 2.24) | 1.51 | (1.21, 1.88) |
| 5 years after baseline | 1.40 | (1.15, 1.72) | 1.81 | (1.47, 2.22) | 1.32 | (1.09, 1.60) |
| 6 years after baseline | 1.30 | (1.06, 1.60) | 1.55 | (1.24, 1.94) | 1.10 | (0.89, 1.35) |
| 8 years after baseline | 1.17 | (0.91, 1.50) | 1.14 | (0.86, 1.51) | 0.82 | (0.63, 1.05) |
| 12 years after baseline | 1.56 | (1.24, 1.97) | 1.09 | (0.83, 1.42) | 0.93 | (0.74, 1.18) |
| 14 years after baseline | 2.19 | (1.79, 2.70) | 1.27 | (0.98, 1.64) | 1.16 | (0.93, 1.44) |
| 15 years after baseline | 2.66 | (2.08, 3.40) | 1.39 | (0.98, 1.95) | 1.30 | (0.98, 1.72) |

Abbreviations: AA, African American; AOR, adjusted odds ratio; CI, confidence interval; F, female; H, Hispanic; M, male; W, non-Hispanic white.

^a Odds ratios and their associated 95% confidence intervals were estimated via generalized estimating equations (GEEs), using restricted cubic splines with 3 interior knots for time since baseline. GEE models were weighted to account for sampling design and are adjusted for age at baseline and legal status (processed in juvenile or adult court).

eTable 6. Odds Ratios Describing Demographic Differences in the Prevalence of Selected Psychiatric Disorders From Detention (Baseline) Through the 15-year Time Point^{a,b}

| Variable | Any Mood Disorder | | Mania | | Major Depression | | Dysthymia | |
|-------------------------|-------------------|--------------|-------|--------------|------------------|--------------|-----------|--------------|
| | AOR | 95% CI | AOR | 95% CI | AOR | 95% CI | AOR | 95% CI |
| Main effects | | | | | | | | |
| Sex | | | | | | | | |
| F vs M | 1.30 | (1.06, 1.59) | 1.19 | (0.87, 1.64) | 1.54 | (1.24, 1.92) | 1.32 | (0.96, 1.81) |
| Race/ethnicity | | | | | | | | |
| W vs AA | 0.95 | (0.71, 1.28) | 1.21 | (0.77, 1.90) | 0.91 | (0.66, 1.27) | 1.05 | (0.68, 1.62) |
| W vs H | 0.87 | (0.62, 1.24) | 0.77 | (0.46, 1.29) | 0.86 | (0.61, 1.23) | 1.04 | (0.63, 1.71) |
| H vs AA | 1.09 | (0.79, 1.49) | 1.58 | (0.95, 2.61) | 1.05 | (0.77, 1.44) | 1.02 | (0.63, 1.64) |
| Time | | | | | | | | |
| 3 years after baseline | 0.89 | (0.83, 0.96) | 0.87 | (0.70, 1.08) | 0.87 | (0.80, 0.95) | 0.52 | (0.41, 0.66) |
| 5 years after baseline | 0.88 | (0.79, 0.97) | 1.25 | (1.04, 1.51) | 0.89 | (0.78, 1.02) | 0.97 | (0.72, 1.32) |
| 6 years after baseline | 0.88 | (0.77, 1.01) | 1.40 | (1.09, 1.80) | 0.90 | (0.76, 1.07) | 1.24 | (0.81, 1.91) |
| 8 years after baseline | 0.95 | (0.89, 1.01) | 1.18 | (1.03, 1.36) | 0.92 | (0.85, 1.00) | 1.29 | (1.06, 1.58) |
| 12 years after baseline | 1.04 | (0.96, 1.12) | 0.91 | (0.80, 1.04) | 1.03 | (0.93, 1.13) | 1.03 | (0.85, 1.25) |
| 14 years after baseline | 1.02 | (0.91, 1.16) | 1.00 | (0.77, 1.29) | 1.11 | (0.92, 1.33) | 1.00 | (0.73, 1.37) |
| 15 years after baseline | 1.02 | (0.88, 1.18) | 1.03 | (0.75, 1.40) | 1.13 | (0.89, 1.42) | 1.00 | (0.68, 1.46) |

Abbreviations: AA, African American; AOR, adjusted odds ratio; CI, confidence interval; F, female; H, Hispanic; M, male; W, non-Hispanic white.

^a Odds ratios and their associated 95% confidence intervals were estimated via generalized estimating equations (GEEs), using restricted cubic splines with 3 interior knots for time since baseline. GEE models were weighted to account for sampling design and are adjusted for age at baseline and legal status (processed in juvenile or adult court).

^b Hypomania is not displayed because there are too few cases to estimate longitudinal models.

eTable 7. Odds Ratios Describing Demographic Differences in the Prevalence of Selected Psychiatric Disorders From Detention (Baseline) Through the 15-year Time Point^a

| Variable | Any Anxiety Disorder | | Generalized Anxiety Disorder | | Panic Disorder | | Posttraumatic Stress Disorder | |
|---------------------------------------|----------------------|--------------|------------------------------|--------------|----------------|--------------|-------------------------------|--------------|
| | AOR | 95% CI | AOR | 95% CI | AOR | 95% CI | AOR | 95% CI |
| Main effects | | | | | | | | |
| Sex | | | | | | | | |
| F vs M | 1.66 | (1.33, 2.06) | 1.02 | (0.71, 1.47) | 1.75 | (1.16, 2.64) | | |
| Race/ethnicity | | | | | | | | |
| W vs AA | 1.00 | (0.73, 1.38) | 0.54 | (0.31, 0.93) | 3.00 | (1.71, 5.27) | 0.78 | (0.54, 1.14) |
| W vs H | 0.70 | (0.50, 0.97) | 0.55 | (0.31, 0.99) | 1.47 | (0.87, 2.47) | 0.51 | (0.34, 0.76) |
| H vs AA | 1.44 | (1.06, 1.95) | 0.97 | (0.58, 1.62) | 2.05 | (1.18, 3.55) | 1.53 | (1.07, 2.19) |
| Time | | | | | | | | |
| 3 years after baseline | 0.97 | (0.87, 1.08) | 0.87 | (0.74, 1.02) | 1.34 | (1.16, 1.54) | | |
| 5 years after baseline | 0.91 | (0.80, 1.03) | 1.15 | (0.90, 1.48) | 1.05 | (0.80, 1.38) | | |
| 6 years after baseline | 0.89 | (0.76, 1.04) | 1.24 | (0.90, 1.71) | 0.95 | (0.68, 1.34) | | |
| 8 years after baseline | 0.93 | (0.86, 1.01) | 1.02 | (0.87, 1.19) | 0.93 | (0.80, 1.09) | | |
| 12 years after baseline | 0.90 | (0.82, 0.98) | 0.73 | (0.62, 0.86) | 0.84 | (0.70, 1.00) | | |
| 14 years after baseline | 0.81 | (0.67, 0.96) | 0.77 | (0.56, 1.06) | 0.72 | (0.51, 1.01) | | |
| 15 years after baseline | 0.79 | (0.63, 0.98) | 0.78 | (0.52, 1.16) | 0.69 | (0.45, 1.06) | | |
| Main effects with interactions | | | | | | | | |
| Sex (F vs M) | | | | | | | | |
| At baseline | | | | | | | 1.46 | (0.80, 2.68) |
| 3 years after baseline | | | | | | | 1.01 | (0.69, 1.49) |
| 5 years after baseline | | | | | | | 1.52 | (1.08, 2.15) |
| 6 years after baseline | | | | | | | 2.20 | (1.43, 3.37) |
| 8 years after baseline | | | | | | | 3.21 | (1.87, 5.53) |
| 12 years after baseline | | | | | | | 1.87 | (1.07, 3.26) |
| 14 years after baseline | | | | | | | 2.38 | (1.47, 3.86) |
| 15 years after baseline | | | | | | | 3.06 | (1.56, 6.03) |

Abbreviations: AA, African American; AOR, adjusted odds ratio; CI, confidence interval; F, female; H, Hispanic; M, male; W, non-Hispanic white.

^a Odds ratios and their associated 95% confidence intervals were estimated via generalized estimating equations (GEEs), using restricted cubic splines with 3 interior knots for time since baseline. GEE models were weighted to account for sampling design and are adjusted for age at baseline and legal status (processed in juvenile or adult court).

eTable 8. Odds Ratios Describing Demographic Differences in the Prevalence of Selected Psychiatric Disorders From Detention (Baseline) Through the 15-year Time Point^a

| Variable | Any Behavioral Disorder ^b | | Antisocial Personality Disorder ^c | |
|---------------------------------------|--------------------------------------|--------------|--|--------------|
| | AOR | 95% CI | AOR | 95% CI |
| Main effects | | | | |
| Sex | | | | |
| M vs F | | | 2.29 | (1.89, 2.78) |
| Race/ethnicity | | | | |
| W vs AA | 1.56 | (1.27, 1.91) | 1.26 | (0.99, 1.60) |
| W vs H | 1.59 | (1.23, 2.05) | 1.44 | (1.06, 1.97) |
| H vs AA | 0.98 | (0.76, 1.26) | 0.87 | (0.64, 1.19) |
| Time | | | | |
| 3 years after baseline | | | 1.30 | (1.10, 1.53) |
| 5 years after baseline | | | 1.22 | (1.08, 1.38) |
| 6 years after baseline | | | 1.18 | (1.06, 1.31) |
| 8 years after baseline | | | 1.11 | (1.04, 1.19) |
| 12 years after baseline | | | 0.98 | (0.95, 1.01) |
| 14 years after baseline | | | 0.92 | (0.86, 0.97) |
| 15 years after baseline | | | 0.89 | (0.82, 0.96) |
| Main effects with interactions | | | | |
| Sex (M vs F) | | | | |
| At baseline | 0.88 | (0.68, 1.14) | | |
| 3 years after baseline | 1.55 | (1.24, 1.94) | | |
| 5 years after baseline | 1.94 | (1.57, 2.39) | | |
| 6 years after baseline | 2.03 | (1.63, 2.53) | | |
| 8 years after baseline | 2.00 | (1.55, 2.60) | | |
| 12 years after baseline | 2.05 | (1.60, 2.62) | | |
| 14 years after baseline | 2.79 | (2.24, 3.48) | | |
| 15 years after baseline | 3.44 | (2.62, 4.52) | | |

Abbreviations: AA, African American; AOR, adjusted odds ratio; CI, confidence interval; F, female; H, Hispanic; M, male; W, non-Hispanic white.

^a Odds ratios and their associated 95% confidence intervals were estimated via generalized estimating equations (GEEs). GEE models were weighted to account for sampling design and are adjusted for age at baseline and legal status (processed in juvenile or adult court).

^b For participants younger than 18 years, behavioral disorder is defined as having conduct disorder or oppositional defiant disorder. For participants aged 18 years or older, it is defined as having antisocial personality disorder. Restricted cubic splines with 3 interior knots were used for modeling time since baseline.

^c Linear and quadratic terms were used for modeling time since the 6-year interview, when participants were aged 18 years or older.

eTable 9. Odds Ratios Describing Demographic Differences in the Prevalence of Selected Psychiatric Disorders From Detention (Baseline) Through the 15-year Time Point^a

| Variable | Any Substance Use Disorder | | Alcohol Use Disorder | | Any Drug Use Disorder | |
|---------------------------------------|----------------------------|--------------|----------------------|--------------|-----------------------|--------------|
| | AOR | 95% CI | AOR | 95% CI | AOR | 95% CI |
| Main effects | | | | | | |
| Race/ethnicity | | | | | | |
| W vs AA | 1.90 | (1.55, 2.33) | 1.72 | (1.35, 2.18) | 1.71 | (1.39, 2.10) |
| W vs H | 1.39 | (1.11, 1.73) | 1.42 | (1.12, 1.79) | 1.26 | (1.01, 1.57) |
| H vs AA | 1.37 | (1.11, 1.70) | 1.21 | (0.96, 1.52) | 1.36 | (1.10, 1.69) |
| Main effects with interactions | | | | | | |
| Sex (M vs F) | | | | | | |
| At baseline | 1.27 | (0.99, 1.62) | 1.03 | (0.78, 1.37) | 1.26 | (0.99, 1.62) |
| 3 years after baseline | 2.35 | (1.85, 3.00) | 2.38 | (1.77, 3.19) | 2.18 | (1.68, 2.83) |
| 5 years after baseline | 2.35 | (1.86, 2.96) | 2.47 | (1.87, 3.27) | 2.27 | (1.78, 2.91) |
| 6 years after baseline | 2.04 | (1.59, 2.61) | 2.12 | (1.59, 2.83) | 2.06 | (1.58, 2.68) |
| 8 years after baseline | 1.51 | (1.15, 1.98) | 1.53 | (1.12, 2.10) | 1.54 | (1.14, 2.09) |
| 12 years after baseline | 1.38 | (1.05, 1.81) | 1.55 | (1.12, 2.16) | 1.14 | (0.84, 1.55) |
| 14 years after baseline | 1.74 | (1.34, 2.27) | 2.17 | (1.56, 3.03) | 1.41 | (1.03, 1.93) |
| 15 years after baseline | 2.03 | (1.44, 2.88) | 2.69 | (1.71, 4.22) | 1.67 | (1.09, 2.56) |

Abbreviations: AA, African American; AOR, adjusted odds ratio; CI, confidence interval; F, female; H, Hispanic; M, male; W, non-Hispanic white.

^a Odds ratios and their associated 95% confidence intervals were estimated via generalized estimating equations (GEEs), using restricted cubic splines with 3 interior knots for time since baseline. GEE models were weighted to account for sampling design and are adjusted for age at baseline and legal status (processed in juvenile or adult court). All models also included covariates for time incarcerated before each interview.

eTable 10. Fifteen-year DSM-IV Diagnoses Predicted From Baseline Diagnoses Among Males^{a,b}

| Baseline Disorder | (N) | Disorder at 15 years (n = 855) ^c | | | | | | | |
|-------------------------|-------|---|--------------------|----------------------|----------------------|-------------------|-------------------|----------------------|-------------------|
| | | Any Mood Disorder | Major Depression | Any Anxiety Disorder | PTSD | ASPD | Any SUD | Alcohol Use Disorder | Drug Use Disorder |
| Major depression | | | | | | | | | |
| % Absent | (769) | 8.7 | 6.8 | 2.6 | 2.3 | 37.6 | 15.2 | 9.1 | 8.8 |
| % Present | (84) | 21.6 | 8.5 | 12.7 | 10.8 | 51.5 | 25.1 | 22.8 | 9.8 |
| OR (95% CI) | | 2.88 (1.02, 8.16) | 1.28 (0.31, 5.18) | 5.41 (1.32, 22.21) | 5.07 (1.01, 25.46) | 1.77 (0.76, 4.10) | 2.11 (0.85, 5.21) | 3.49 (1.30, 9.37) | 1.18 (0.34, 4.07) |
| AOR (95% CI) | | 1.63 (0.23, 11.40) | 1.28 (0.31, 5.18) | 15.49 (1.25, 191.88) | 22.30 (2.03, 244.85) | 1.28 (0.53, 3.06) | 1.92 (0.77, 4.79) | 3.69 (1.45, 9.38) | 1.06 (0.32, 3.52) |
| Dysthymia | | | | | | | | | |
| % Absent | (789) | 8.8 | 6.7 | 2.8 | 2.3 | 36.9 | 14.6 | 9.0 | 8.2 |
| % Present | (67) | 20.8 | 9.2 | 11.8 | 11.1 | 56.4 | 31.9 | 24.5 | 15.7 |
| OR (95% CI) | | 2.71 (0.88, 8.34) | 1.41 (0.34, 5.77) | 4.71 (1.01, 21.97) | 5.23 (1.00, 27.45) | 2.22 (0.92, 5.35) | 3.36 (1.29, 8.71) | 3.98 (1.43, 11.06) | 2.29 (0.69, 7.64) |
| AOR (95% CI) | | 1.32 (0.25, 7.01) | 1.39 (0.52, 3.73) | 10.00 (0.73, 136.83) | 18.27 (1.71, 195.70) | 1.74 (0.69, 4.41) | 3.11 (1.21, 8.01) | 4.07 (1.53, 10.86) | 2.09 (0.66, 6.61) |
| GAD | | | | | | | | | |
| % Absent | (830) | 10.1 | 7.1 | 3.6 | 3.2 | 39.4 | 16.5 | 10.6 | 9.1 |
| % Present | (21) | 3.9 | 2.8 | 1.6 | 0.0 | 14.9 | 6.0 | 3.8 | 2.2 |
| OR (95% CI) | | 0.36 (0.08, 1.67) | 0.38 (0.06, 2.38) | 0.44 (0.08, 2.54) | — — — | 0.27 (0.09, 0.82) | 0.38 (0.10, 1.52) | 0.45 (0.09, 2.14) | 0.25 (0.03, 2.13) |
| AOR (95% CI) | | 0.18 (0.03, 0.91) | 0.27 (0.04, 2.14) | — — — | — — — | 0.16 (0.05, 0.52) | 0.33 (0.08, 1.33) | 0.43 (0.09, 2.07) | 0.23 (0.03, 1.92) |
| PTSD^d | | | | | | | | | |
| % Absent | (328) | 13.0 | 12.7 | 2.8 | 2.4 | 33.7 | 21.4 | 10.3 | 11.7 |
| % Present | (29) | 4.3 | 4.3 | 3.7 | 1.0 | 34.0 | 9.5 | 5.6 | 3.9 |
| OR (95% CI) | | 0.30 (0.05, 1.71) | 0.31 (0.06, 1.77) | 1.34 (0.15, 12.31) | 0.40 (0.03, 5.73) | 1.02 (0.18, 5.79) | 0.31 (0.08, 1.20) | 0.40 (0.07, 2.35) | 0.27 (0.05, 1.44) |
| AOR (95% CI) | | 0.29 (0.05, 1.72) | 0.27 (0.04, 1.78) | — — — | 0.40 (0.03, 5.73) | 0.97 (0.14, 6.55) | 0.20 (0.05, 0.83) | 0.26 (0.03, 2.31) | 0.23 (0.04, 1.34) |
| Conduct disorder | | | | | | | | | |
| % Absent | (597) | 8.2 | 7.1 | 2.9 | 2.6 | 35.0 | 12.0 | 7.3 | 6.7 |
| % Present | (256) | 15.2 | 6.8 | 5.6 | 4.8 | 51.4 | 28.8 | 19.6 | 15.6 |
| OR (95% CI) | | 2.01 (0.86, 4.67) | 0.95 (0.34, 2.64) | 1.97 (0.55, 7.11) | 1.92 (0.45, 8.21) | 1.96 (1.12, 3.42) | 2.87 (1.50, 5.50) | 3.07 (1.43, 6.56) | 2.44 (1.09, 5.45) |
| AOR (95% CI) | | 1.61 (0.66, 3.92) | 0.90 (0.28, 2.91) | 1.19 (0.22, 6.45) | 0.69 (0.07, 6.58) | 1.66 (0.46, 5.99) | 2.89 (1.44, 5.80) | 3.36 (1.57, 7.15) | 2.34 (0.98, 5.61) |
| ODD | | | | | | | | | |
| % Absent | (733) | 8.6 | 7.1 | 2.7 | 2.3 | 37.6 | 16.8 | 10.6 | 9.5 |
| % Present | (122) | 17.5 | 5.8 | 8.6 | 8.2 | 44.5 | 12.0 | 9.0 | 4.8 |
| OR (95% CI) | | 2.26 (0.85, 6.03) | 0.81 (0.21, 3.16) | 3.36 (0.84, 13.44) | 3.85 (0.86, 17.30) | 1.33 (0.66, 2.69) | 0.72 (0.33, 1.56) | 0.90 (0.36, 2.24) | 0.50 (0.23, 1.10) |
| AOR (95% CI) | | 1.70 (0.56, 5.13) | 0.72 (0.14, 3.73) | 14.95 (1.93, 115.61) | 35.59 (4.47, 283.13) | 0.70 (0.29, 1.68) | 0.59 (0.23, 1.47) | 0.85 (0.30, 2.43) | 0.42 (0.18, 0.98) |
| ADHD | | | | | | | | | |
| % Absent | (750) | 8.1 | 6.0 | 2.1 | 1.8 | 39.2 | 14.4 | 8.8 | 7.7 |
| % Present | (104) | 23.5 | 13.7 | 14.4 | 13.0 | 33.7 | 29.3 | 22.3 | 17.8 |
| OR (95% CI) | | 3.50 (1.31, 9.33) | 2.48 (0.74, 8.33) | 7.86 (2.16, 28.61) | 8.26 (1.95, 34.95) | 0.79 (0.35, 1.75) | 2.78 (1.23, 6.27) | 3.38 (1.37, 8.33) | 2.75 (1.01, 7.48) |
| AOR (95% CI) | | 2.76 (0.79, 9.64) | 2.68 (0.53, 13.51) | 11.60 (1.55, 86.69) | 17.48 (2.01, 152.30) | 0.40 (0.16, 0.99) | 2.55 (1.11, 5.84) | 3.46 (1.38, 8.66) | 2.45 (0.91, 6.64) |

| Alcohol use disorder | | | | | | | | | | |
|-----------------------------|-------|-------------------|-------------------|--------------------|--------------------|-------------------|-------------------|-------------------|-------------------|--|
| % Absent | (641) | 10.3 | 8.5 | 3.7 | 3.3 | 37.1 | 16.7 | 10.4 | 9.1 | |
| % Present | (209) | 8.9 | 2.5 | 3.1 | 2.5 | 42.0 | 15.0 | 10.6 | 8.4 | |
| OR (95% CI) | | 0.85 (0.34, 2.12) | 0.28 (0.12, 0.64) | 0.83 (0.20, 3.47) | 0.74 (0.13, 4.12) | 1.23 (0.69, 2.19) | 0.88 (0.46, 1.70) | 1.07 (0.50, 2.31) | 0.90 (0.39, 2.09) | |
| AOR (95% CI) | | 0.65 (0.26, 1.63) | 0.24 (0.09, 0.61) | 0.45 (0.08, 2.42) | 0.20 (0.02, 2.33) | 0.96 (0.52, 1.79) | 0.59 (0.27, 1.30) | 1.07 (0.50, 2.31) | 0.72 (0.29, 1.78) | |
| Drug use disorder | | | | | | | | | | |
| % Absent | (478) | 8.5 | 5.4 | 1.9 | 1.7 | 36.6 | 13.3 | 7.4 | 7.3 | |
| % Present | (370) | 11.9 | 9.1 | 5.8 | 5.0 | 40.9 | 20.2 | 14.4 | 11.2 | |
| OR (95% CI) | | 1.47 (0.65, 3.34) | 1.76 (0.67, 4.64) | 3.17 (0.91, 11.08) | 3.14 (0.77, 12.90) | 1.20 (0.72, 1.98) | 1.60 (0.85, 3.00) | 2.07 (0.96, 4.48) | 1.54 (0.70, 3.40) | |
| AOR (95% CI) | | 1.36 (0.57, 3.25) | 1.76 (0.64, 4.86) | 5.02 (0.89, 28.41) | 4.85 (0.60, 38.99) | 0.98 (0.56, 1.73) | 1.80 (0.62, 5.22) | 2.28 (1.00, 5.22) | 1.54 (0.70, 3.40) | |

Abbreviations: ADHD, attention-deficit/hyperactivity disorder; AOR, adjusted odds ratio; ASPD, antisocial personality disorder; CD, conduct disorder; CI, confidence interval; GAD, generalized anxiety disorder; ODD, oppositional defiant disorder; OR, odds ratio; PTSD, posttraumatic stress disorder; SUD, substance use disorder.

^a Prevalence estimates and ORs are weighted to adjust for sampling design and reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center.

^b Prevalence estimates of disorder 15 years after detention among males who did and did not have disorder present at baseline. ORs contrast the prevalence of disorder 15 years (shown in the columns) after detention between males who had the disorder at detention (shown in the rows), compared with those who did not have the disorder at detention. In each cell, the first OR is unadjusted and the second is adjusted for the disorder at baseline. Gray shading indicates homotypic prediction within category of disorder (affective, anxiety, behavioral, or substance).

^c Refers to the number of participants who completed the diagnostic interview.

^d At baseline, assessed for males (n = 514) who were interviewed after the PTSD module became available.

eTable 11. Fifteen-year DSM-IV Diagnoses Predicted From Baseline Diagnoses Among Females^{a,b}

| Baseline Disorder | (N) | Disorder at 15 years (n = 541) ^c | | | | | | | |
|-------------------------|-------|---|-------------------|----------------------|-------------------|-------------------|-------------------|----------------------|-------------------|
| | | Any Mood Disorder | Major Depression | Any Anxiety Disorder | PTSD | ASPD | Any SUD | Alcohol Use Disorder | Drug Use Disorder |
| Major depression | | | | | | | | | |
| % Absent | (446) | 6.2 | 4.8 | 6.8 | 5.7 | 12.1 | 8.5 | 4.0 | 4.7 |
| % Present | (98) | 15.8 | 7.1 | 14.9 | 10.6 | 27.5 | 16.6 | 8.4 | 11.4 |
| OR (95% CI) | | 2.84 (1.43, 5.63) | 1.52 (0.62, 3.73) | 2.39 (1.20, 4.74) | 1.97 (0.91, 4.30) | 2.77 (1.59, 4.82) | 2.23 (1.18, 4.23) | 2.11 (0.87, 5.13) | 2.80 (1.28, 6.11) |
| AOR (95% CI) | | 0.83 (0.21, 3.28) | 1.52 (0.62, 3.73) | 2.84 (1.18, 6.87) | 2.62 (0.99, 6.94) | 1.81 (1.04, 3.15) | 2.07 (1.07, 4.00) | 1.94 (0.79, 4.77) | 2.68 (1.21, 5.94) |
| Dysthymia | | | | | | | | | |
| % Absent | (477) | 7.1 | 4.9 | 6.8 | 5.7 | 13.0 | 9.0 | 4.4 | 5.1 |
| % Present | (67) | 14.2 | 7.8 | 19.0 | 12.6 | 27.8 | 16.7 | 7.8 | 12.1 |
| OR (95% CI) | | 2.17 (0.98, 4.81) | 1.66 (0.60, 4.59) | 3.20 (1.54, 6.64) | 2.37 (1.02, 5.51) | 2.56 (1.37, 4.80) | 2.08 (1.01, 4.29) | 1.79 (0.63, 5.10) | 2.74 (1.17, 6.39) |
| AOR (95% CI) | | 0.71 (0.26, 1.96) | 1.40 (0.36, 5.48) | 3.60 (1.36, 9.52) | 3.13 (1.13, 8.70) | 1.61 (0.84, 3.11) | 1.93 (0.93, 4.03) | 1.63 (0.55, 4.82) | 2.60 (1.10, 6.12) |
| GAD | | | | | | | | | |
| % Absent | (509) | 7.5 | 5.0 | 7.6 | 6.1 | 14.3 | 9.8 | 4.3 | 5.9 |
| % Present | (32) | 16.1 | 9.1 | 20.6 | 14.0 | 21.4 | 12.7 | 12.7 | 6.4 |
| OR (95% CI) | | 2.39 (0.86, 6.65) | 1.91 (0.54, 6.77) | 3.17 (1.22, 8.25) | 2.49 (0.82, 7.61) | 1.63 (0.64, 4.15) | 1.63 (0.53, 5.04) | 3.62 (1.12, 11.75) | 1.37 (0.30, 6.23) |
| AOR (95% CI) | | 1.47 (0.53, 4.04) | 1.64 (0.48, 5.58) | 2.88 (0.55, 15.00) | 1.66 (0.33, 8.31) | 1.06 (0.42, 2.67) | 1.52 (0.48, 4.80) | 3.62 (1.08, 12.09) | 1.24 (0.26, 5.94) |
| PTSD^d | | | | | | | | | |
| % Absent | (253) | 7.8 | 4.5 | 9.7 | 8.1 | 12.6 | 8.5 | 4.0 | 4.4 |
| % Present | (34) | 9.2 | 9.2 | 9.2 | 9.2 | 5.6 | 9.2 | 3.1 | 6.1 |
| OR (95% CI) | | 1.20 (0.33, 4.39) | 2.14 (0.55, 8.23) | 0.95 (0.26, 3.39) | 1.15 (0.32, 4.17) | 0.41 (0.09, 1.82) | 1.28 (0.35, 4.66) | 0.88 (0.11, 7.36) | 1.69 (0.35, 8.28) |
| AOR (95% CI) | | 1.17 (0.33, 4.20) | 2.04 (0.54, 7.63) | 0.26 (0.05, 1.37) | 1.15 (0.32, 4.17) | 0.37 (0.08, 1.59) | 1.07 (0.30, 3.82) | 0.67 (0.08, 5.45) | 1.59 (0.32, 8.03) |
| Conduct disorder | | | | | | | | | |
| % Absent | (388) | 7.1 | 5.2 | 6.8 | 6.0 | 10.2 | 8.5 | 4.4 | 4.7 |
| % Present | (155) | 10.0 | 5.2 | 12.2 | 8.1 | 28.8 | 13.6 | 5.8 | 9.1 |
| OR (95% CI) | | 1.44 (0.74, 2.81) | 1.00 (0.43, 2.34) | 1.91 (1.00, 3.62) | 1.39 (0.66, 2.89) | 3.58 (2.14, 6.00) | 1.69 (0.93, 3.06) | 1.28 (0.55, 3.00) | 2.09 (0.99, 4.39) |
| AOR (95% CI) | | 1.06 (0.56, 2.03) | 0.91 (0.40, 2.06) | 1.35 (0.57, 3.21) | 1.00 (0.37, 2.69) | 1.86 (0.71, 4.86) | 1.47 (0.81, 2.70) | 1.00 (0.40, 2.55) | 1.81 (0.91, 3.60) |
| ODD | | | | | | | | | |
| % Absent | (451) | 7.5 | 4.5 | 7.0 | 5.8 | 13.1 | 8.5 | 3.3 | 5.1 |
| % Present | (93) | 10.0 | 8.8 | 14.5 | 10.0 | 23.4 | 17.2 | 11.8 | 9.9 |
| OR (95% CI) | | 1.36 (0.62, 2.98) | 2.07 (0.87, 4.91) | 2.25 (1.12, 4.52) | 1.78 (0.80, 3.98) | 2.03 (1.14, 3.62) | 2.20 (1.13, 4.28) | 4.33 (1.87, 10.01) | 1.89 (0.81, 4.44) |
| AOR (95% CI) | | 0.82 (0.35, 1.92) | 1.94 (0.81, 4.66) | 2.21 (0.90, 5.43) | 2.06 (0.79, 5.39) | 0.72 (0.35, 1.45) | 2.01 (1.02, 3.97) | 3.85 (1.67, 8.88) | 1.74 (0.73, 4.15) |
| ADHD | | | | | | | | | |
| % Absent | (446) | 6.6 | 4.0 | 7.5 | 5.9 | 12.8 | 9.0 | 3.6 | 5.4 |
| % Present | (97) | 12.8 | 9.5 | 11.7 | 9.5 | 23.6 | 13.6 | 9.4 | 7.4 |
| OR (95% CI) | | 2.06 (1.00, 4.22) | 2.50 (1.07, 5.80) | 1.63 (0.79, 3.37) | 1.68 (0.75, 3.74) | 2.11 (1.19, 3.74) | 1.57 (0.78, 3.13) | 2.96 (1.24, 7.04) | 1.33 (0.54, 3.27) |
| AOR (95% CI) | | 1.33 (0.57, 3.09) | 2.59 (1.02, 6.56) | 1.67 (0.63, 4.38) | 1.88 (0.72, 4.91) | 1.15 (0.60, 2.22) | 1.47 (0.74, 2.95) | 2.68 (1.16, 6.21) | 1.25 (0.51, 3.05) |

| Alcohol use disorder | | | | | | | | | |
|----------------------|-------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|-------------------|
| % Absent | (392) | 8.0 | 4.8 | 7.0 | 5.3 | 12.5 | 7.7 | 3.8 | 4.1 |
| % Present | (143) | 8.1 | 6.6 | 12.5 | 10.4 | 22.1 | 17.0 | 7.7 | 11.4 |
| OR (95% CI) | | 1.00 (0.49, 2.07) | 1.40 (0.61, 3.21) | 1.92 (1.00, 3.66) | 2.04 (1.00, 4.19) | 1.99 (1.17, 3.36) | 2.51 (1.40, 4.52) | 2.10 (0.92, 4.81) | 3.08 (1.47, 6.44) |
| AOR (95% CI) | | 0.91 (0.43, 1.89) | 1.35 (0.60, 3.00) | 1.93 (0.82, 4.54) | 1.88 (0.76, 4.66) | 1.39 (0.79, 2.43) | 2.86 (1.17, 6.96) | 2.10 (0.92, 4.81) | 3.30 (1.47, 7.42) |
| Drug use disorder | | | | | | | | | |
| % Absent | (310) | 7.5 | 4.8 | 7.1 | 5.7 | 12.5 | 8.5 | 4.2 | 4.6 |
| % Present | (223) | 9.0 | 6.1 | 10.4 | 8.1 | 18.0 | 12.0 | 5.3 | 8.1 |
| OR (95% CI) | | 1.23 (0.65, 2.35) | 1.30 (0.60, 2.84) | 1.53 (0.81, 2.86) | 1.44 (0.71, 2.90) | 1.53 (0.93, 2.54) | 1.44 (0.81, 2.57) | 1.21 (0.53, 2.77) | 1.80 (0.86, 3.75) |
| AOR (95% CI) | | 1.11 (0.57, 2.15) | 1.26 (0.59, 2.70) | 2.18 (0.95, 5.03) | 2.03 (0.82, 5.01) | 1.07 (0.62, 1.86) | 0.59 (0.16, 2.18) | 0.78 (0.26, 2.34) | 1.80 (0.86, 3.75) |

Abbreviations: ADHD, attention-deficit/hyperactivity disorder; AOR, adjusted odds ratio; ASPD, antisocial personality disorder; CD, conduct disorder; CI, confidence interval; GAD, generalized anxiety disorder; ODD, oppositional defiant disorder; OR, odds ratio; PTSD, posttraumatic stress disorder; SUD, substance use disorder.

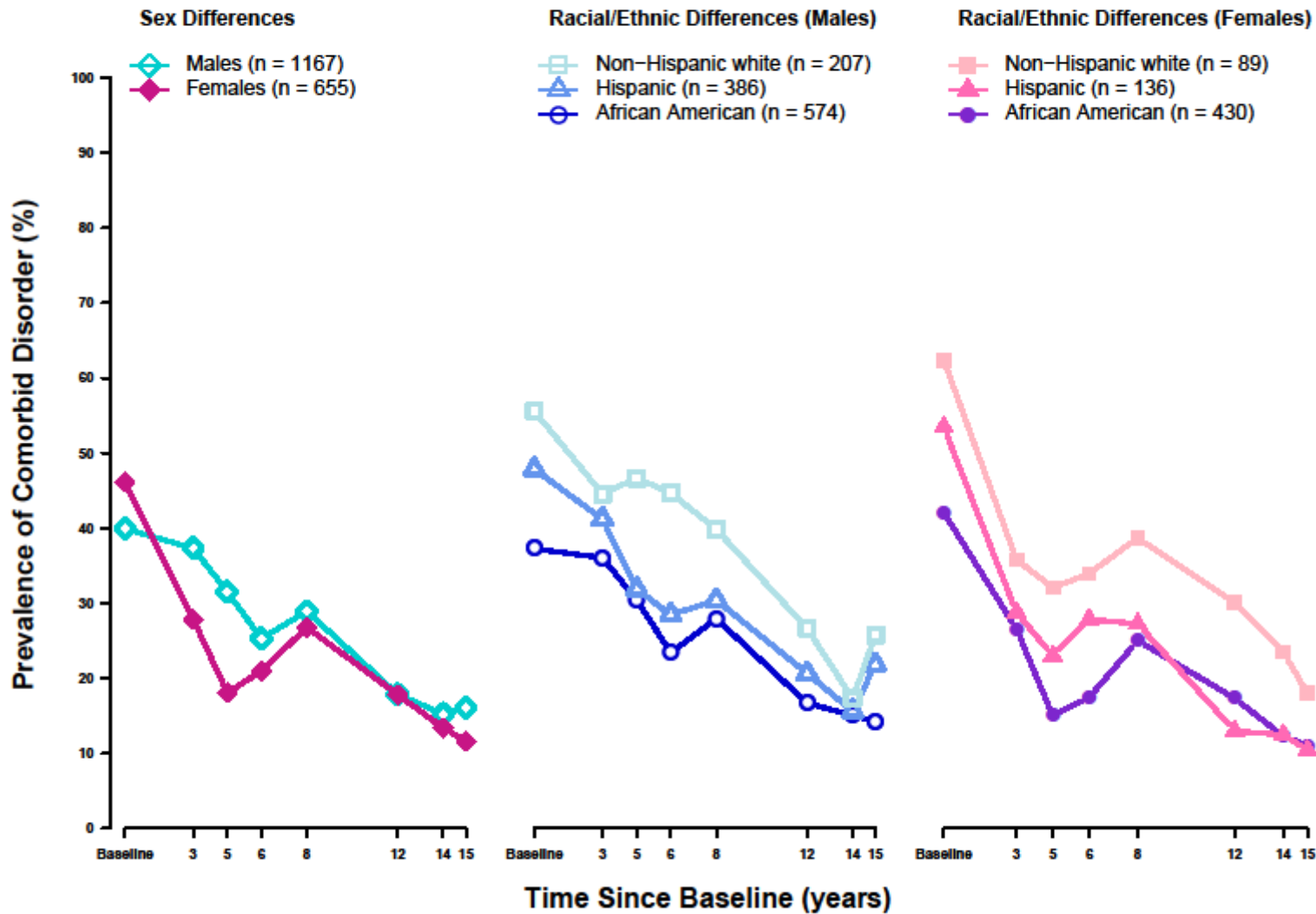
^a Prevalence estimates and odds ratios are weighted to adjust for sampling design and reflect the demographic characteristics of the Cook County Juvenile Temporary Detention Center.

^b Prevalence estimates of disorder 15 years after detention among females who did and did not have disorder present at baseline. ORs contrast the prevalence of disorder 15 years (shown in the columns) after detention between females who had the disorder at detention (shown in the rows), compared with those who did not have the disorder at detention. In each cell, the first OR is unadjusted and the second is adjusted for the disorder at baseline. Gray shading indicates homotypic prediction within category of disorder (affective, anxiety, behavioral, or substance).

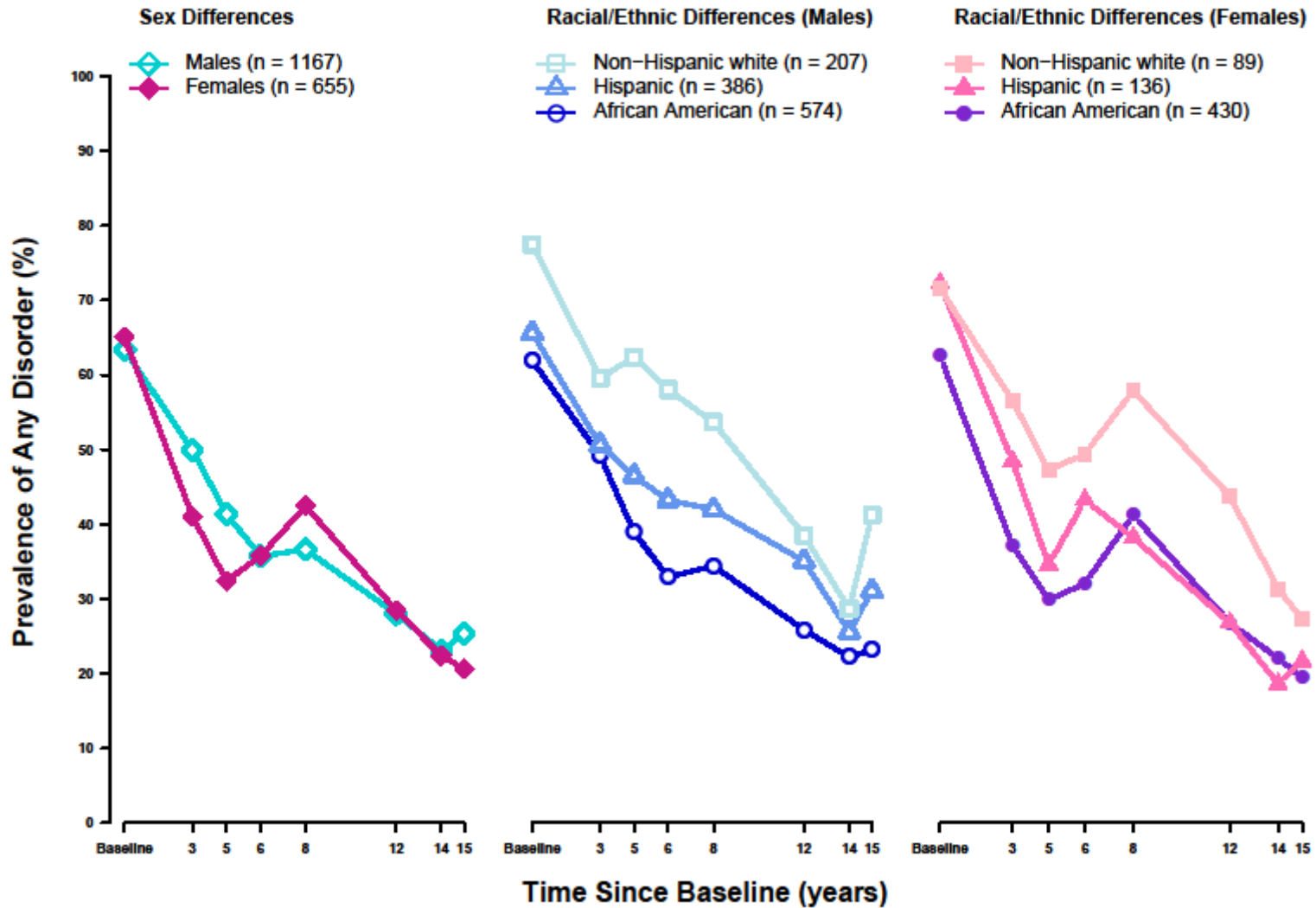
^c Refers to the number of participants who completed the diagnostic interview.

^d At baseline, assessed for females (n = 349) who were interviewed after the PTSD module became available.

eFigure 1. Prevalence of Comorbid Disorder in Delinquent Youth From Detention (Baseline) to 15 Years Post-Baseline: Sex and Racial/Ethnic Differences



eFigure 2. Prevalence of Any Disorder (Excluding Behavioral Disorders) in Delinquent Youth From Detention (Baseline) to 15 Years Post-Baseline: Sex and Racial/Ethnic Differences



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